

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph on page 6, line 31 through page 7, line 8 with the following paragraph:

A portable measuring device (PMD) is shown in FIGS. 1a, 1b, 1c and 1d consisting of a housing 1 in the interior of which is located a plurality of motion sensors 2a, 2b, 2c, 2d, 2e and 2f in the form of inertial measurement components as a self-contained unit. The inertial measurement components, preferably in the form of an inertial measuring unit (IMU) 2, and their associated electronic interface components are typically prone to drift due to temperature variation. In use, the PMD may be subject to rapid temperature variations e.g. heat from a user's hand. To minimise the effect of a variation in external temperature on the internal components of the PMD, the material of the housing 1 is preferably selected to be thermally insulating and thus have a high thermal resistance. Also, the housing 1 may be sealed to eliminate variations in internal temperature due to convection.

Please replace the paragraph on page 7, lines 9-15 with the following paragraph:

A measuring point 3 is provided on the exterior of the housing 1 against which all spatial measurements of the PMD are referenced. The measuring point 3 may be an integral part of the housing 1 or may be connected thereto and is visually distinguishable and capable of alignment by a user with a selected location from or to which measurements are to be taken. Additionally

virtual measuring points representing locations remote from the PMD may be identified by the PMD by means of a laser beam or other beam generated by a laser emitter in a laser emitter and detector 3a, and detected by the detector in laser emitter and detector 3a, which is discussed in more detail below.

Please replace the paragraph on page 8, line 28 through page 9, line 5 with the following paragraph:

In an alternative embodiment, ~~(not illustrated)~~ a laser emitter and detector 3a is provided in or connected to the PMD as shown in Fig. 1c to enable non-contact relative measurements to be performed by means of conventional capture laser distance measurement techniques such as those described in U.S. Pat. No. 6,191,845. Each remote point of reflection of the laser beam is treated by the IMU 2 as a virtual measuring point and, as the laser beam is deemed to travel in a straight line, the relative spatial separation of different points of reflection can be determined by the PMD using conventional trigonometric theory. With this embodiment it is not the translational and rotational movement of the virtual measuring point that is determined but rather measurement of the translational and rotational movement of the PMD, relative to the virtual measuring points, which enables measurement of the spatial separation of the two locations.